DI-PHY

INNOVATIONS

WHERE DIGITAL MEETS PHYSICAL

How to Create a Data Culture

This course is designed to guide participants through the process of establishing a data culture within their organisation.

Participants will learn the key steps and strategies involved in creating a data driven environment that promotes effective decision-making, improves business outcomes, and fosters innovation.

Through interactive exercises and practical examples, participants will gain the knowledge and skills necessary to drive the implementation of a successful data culture within their organisation.

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About Us

Di-Phy Innovations

Di-Phy Innovations is a New Zealand based company. We offers digital twin solutions for Product Design, Process Lifecycle, Environment, Agriculture, Energy & Utilities, Smart Cities, Construction, and Organisational Twins. Our customers range from Government Agencies, Utility Companies, Transport, Manufactory, and Smart Cities.

Di-Phy Innovations was founded by Regine Deleu. Regine is an entrepreneurial leader who brings international expertise in administering successful transformation programs. She is experienced in leading complex business transformations, which result in innovation, growth, and sustainability.

Regine is an Excellence Supreme Award finalist 2018 for IT Professional of the Year, and finalist at the Women of Influence award 2015 for innovation.

Regine has served on governance boards as an Enterprise Architecture Expert and a Data Research Advisory Board Member at both the International Organisation for Standardisation (ISO) and the Massachusetts Institute of Technology (MIT), respectively.

Intro

Driving Business Success through Data-Driven Decision Making

Having a data culture is crucial for embracing and effectively leveraging digital twin technology to drive business outcomes such as increased profit, enhanced efficiency, and reduced carbon footprint.

A data culture promotes a mindset where data is valued, and its utilisation becomes ingrained in daily operations and decision-making processes. It encourages employees at all levels to collect, analyse, and leverage data to gain insights and make informed decisions.

Digital twin technology, which creates a virtual replica of physical assets or processes, relies heavily on data collection and analysis. A strong data culture ensures that the organisation recognises the value of data as a strategic asset for optimising performance and sustainability. It fosters a culture of data-driven decision-making, where employees are empowered to use real-time data and insights from digital twin models to identify inefficiencies, optimise processes, and make proactive improvements.

By having a data culture in place, organisations can fully harness the potential of digital twin technology to drive positive outcomes. This includes maximising profit by identifying cost-saving opportunities, streamlining operations, and enhancing productivity. Moreover, an organisation with a data culture can leverage digital twin technology to monitor and optimise energy consumption, resource utilisation, and emissions, thereby reducing its carbon footprint and contributing to sustainable practices.

Di-Phy Innovations Limited

Course Overview

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Course Duration

2 days (16 hours)

Course Outline

Day 1

Module 1: Introduction to Data Culture (9:00-9:30)

- Definition and importance of a data culture (9:00-9:10)
- Benefits and impact of a data-driven organisation (9:10-9:20)
- Aligning data culture with strategic objectives (9:20-9:30)

Module 2: Defining the Vision and Objectives (9:30-10:30)

- Articulating the vision for a data-driven culture (9:30-9:50)
- Setting measurable objectives and outcomes (9:50-10:10)
- Aligning the data culture with organisational goals (10:10-10:30)

Tea Break (10:30-10:50)

Module 3: Communicating the Importance (10:50-11:50)

- Educating stakeholders on the value of data-driven decision-making (10:50-11:10)
- Crafting effective communication strategies (11:10-11:30)
- Creating awareness and buy-in across all levels of the organisation (11:30-11:50)

Module 4: Fostering Data Literacy (11:50–12:50)

- Promoting data literacy and awareness (11:50–12:10)
- Providing training and resources for data skills development (12:10–12:30)
- Encouraging continuous learning and professional growth (12:30–12:50)

Lunch break (12:50–13:30)

Module 5: Leading by Example (13:30–14:30)

- The role of leadership in driving a data culture (13:30–13:50)
- Demonstrating data-driven decision-making (13:50–14:10)
- Communicating the positive outcomes of data-driven practices (14:10–14:30)

Module 6: Establishing Data Governance (14:30–16:30)

- Understanding the principles of data governance (14:30–15:00)

Tea break (15:00–15:20)

- Defining roles and responsibilities for data management (15:20–16:00)
- Developing data standards, policies, and guidelines (16:00–16:30)

Day 2

Module 7: Providing Accessible Data Infrastructure (9:00–10:00)

- Evaluating and improving data infrastructure (9:00–9:20)
- Enhancing data accessibility and usability (9:20–9:40)
- Exploring user-friendly data tools and platforms (9:40–10:00)

Module 8: Encouraging Collaboration (10:00–11:40)

- Creating opportunities for collaboration and knowledge sharing (10:00–10:20)

Tea break (10:20–10:40)

- Establishing platforms for sharing insights and best practices (10:40–11:00)
- Building cross-functional teams to drive data initiatives (11:00–11:40)

Module 9: Recognising and Rewarding Data-Driven Practices (11:40-12:40)

- Establishing recognition programs and incentives (11:40-12:00)
- Motivating employees to embrace data-driven practices (12:00-12:20)
- Celebrating successes and sharing best practices (12:20-12:40)

Lunch break (12:40-13:20)

Module 10: Measuring and Evaluating (13:20-15:20)

- Developing KPIs to measure the effectiveness of the data culture (13:20-14:00)
- Assessing the impact of data-driven practices on business outcomes (14:00-14:40)
- Making adjustments and improvements based on evaluation results (14:40-15:20)

Tea break (15:20-15:40)

Module 11: Iterating and Improving (15:40-16:40)

- Continuously gathering feedback and insights (15:40-16:00)
- Identifying challenges and opportunities for improvement (16:00-16:20)
- Adapting and refining data culture strategies (16:20-16:40)

Course Conclusion

In the final session, participants will reflect on their learnings from the course and develop an action plan to implement a data culture within their organisation. They will have the opportunity to discuss challenges, share insights, and receive feedback from the instructor and fellow participants.

Course Materials

- Course handouts and worksheets
- Case studies and real-world examples
- Interactive exercises and group discussions

Note: This course outline can be customised and expanded based on the specific needs and requirements of the organisation.

Profile Trainer

Regine Deleu

Regine is a dynamic and entrepreneurial leader with a wealth of international experience in orchestrating successful transformation programs. Her expertise lies in spearheading complex business transformations that drive innovation, foster growth, and ensure long-term sustainability.

What sets Regine apart is her innate creativity and out-of-the-box thinking. She approaches challenges with a fresh and inventive perspective, forging new pathways and devising unconventional solutions that break the traditional moulds. Her ability to convert insights and ideas into actionable outcomes generates tangible and meaningful results, inspiring behavioural change and creating new opportunities for the organisation.

Regine's impressive track record extends to her service on prestigious governance boards. As an Enterprise Architecture Expert and a Data Research Advisory Board Member, she has contributed her expertise to influential organisations such as the International Organisation for Standardisation and the Massachusetts Institute of Technology, respectively. Her strategic insights and forward-thinking approach have been instrumental in shaping industry standards and driving cutting-edge research.

With Regine at the helm, executives can expect unparalleled leadership, innovation, and a resolute commitment to unlocking the full potential of their organisations. Her ability to navigate complex landscapes, coupled with her passion for driving meaningful change, make her an invaluable asset for any business seeking to achieve transformative and sustainable growth.

Awards

- Finalist Supreme Award – IT Professional of the Year 2018, IT Professionals NS

- Finalist for Innovation for the 2015 Women of Influence Award, Fairfax Media and Westpac

- Enterprise Architecture Values in Action Award, Inland Revenue

Education

- Master of Computer Science

- Bachelor of Engineering, Computer Science

Professional Experience

Regine is a visionary leader who has spearheaded the development of Digital Twins across various industries, including Smart Cities, Ports, Utilities (energy, waste management), Production lines, Damage prevention, and Digital Twins for Organisations. Her expertise lies in crafting comprehensive strategies, roadmaps, and overseeing the implementation of these innovative digital solutions.

In both the public and private sectors, Regine excels in creating and executing strategic goals and direction, as well as driving digital transformation programs. Her portfolio includes significant achievements such as envisioning the Digital Future for Local Government, Telecommunications, and Security Services. Additionally, she has played a pivotal role in the creation of a country-wide energy grid digital twin, revolutionising the energy sector's operations.

Regine's unique blend of strategic thinking and hands-on expertise has made her an invaluable asset in the world of digital innovation. Her accomplishments in establishing and implementing digital twins across diverse industries have not only enhanced operational efficiency but also empowered organisations to make data-driven decisions for long-term success.

Data Culture and Governance Model – Fire and Emergency New Zealand

The Fire and Emergency New Zealand (FENS) Data Culture and Governance Model is an essential first phase in the creation of a cutting-edge digital twin system aimed at identifying potential hazards and dangers. By leveraging the power of data, the digital twin aims to enhance FENS's operational capabilities, providing critical insights to identify, assess, and mitigate potential hazards and dangers effectively.

Digital Twin – Auckland Transport

Regine's visionary leadership led to the successful creation of a transformative Digital Twin for Auckland Transport, becoming an integral part of their change management initiatives. Her contributions encompassed the establishment of a dedicated architecture team, the design of purpose-driven strategies and goals, and the meticulous crafting of a Digital Twin blueprint and roadmap.

With a keen eye for innovation and attention to detail, Regine took charge of the entire implementation process, ensuring seamless execution from start to finish. Her strategic approach and hands-on guidance have enabled Auckland Transport to harness the power of the Digital Twin, revolutionising their operations and paving the way for enhanced decision-making and performance optimisation. Under her direction, the Digital Twin initiative has become a pivotal driver of positive change, positioning Auckland Transport at the forefront of cutting-edge technology adoption in the transportation sector.

Government Enterprise Architecture for New Zealand

The core objective of Enterprise Architecture is to guarantee that technology, information, and process development investments are not only cost-effective but also sustainable, while remaining in perfect alignment with the organisation's strategic objectives. This comprehensive framework is meticulously crafted to be adaptable for implementation at agency, sector, and All-Of-Government levels. By embracing Enterprise Architecture, executives can optimise resource allocation, drive innovation, and achieve seamless integration of technology solutions across the organisation, ultimately leading to increased efficiency and enhanced strategic outcomes.

Data and Information Management Framework

In today's digital landscape, information has emerged as a critical economic resource and stands as one of the organisation's most invaluable assets. However, despite its undeniable significance, quantifying the true value of information has been a challenge. As data consumption, storage, processing, and maintenance demands grow exponentially, this invaluable asset often goes unrecognised financially. As executives, recognising the true value of information and devising effective strategies to measure and capitalise on its potential will be essential in driving innovation, optimising resource allocation, and gaining a competitive edge in the dynamic business landscape. Embracing data-driven decision-making and implementing robust information management practices will not only unlock hidden value but also empower the organisation to harness the full potential of its most prised asset - information.

Accelerated Delivery Methodology

The driving force behind the Accelerated Delivery Methodology is to expedite the delivery of superior government services for New Zealanders, with a keen focus on customer outcomes and service experiences. This methodology achieves its objectives by harnessing the power of technology enablement, bolstered by effective policy support and streamlined delivery processes. By adopting this approach, executives can elevate their organisation's service delivery capabilities, ensuring that citizens receive efficient and customer-centric services that cater to their evolving needs and preferences. The Accelerated Delivery Methodology is a transformative tool that empowers executives to foster innovation, optimise operational efficiency, and elevate customer satisfaction, solidifying the organisation's reputation as a forward-thinking and citizen-focused government entity.

Government Business Capability Model

The Government Business Capability Model stands as a pivotal achievement within the New Zealand Government Strategy, specifically designed to enhance public sector business capabilities. This model serves as a unifying framework, laying the foundation for a substantial improvement in business capabilities across various government entities. By embracing this model, executives can foster collaboration, facilitate seamless information sharing, and identify new avenues for capability development. With a standardised and integrated approach to business capabilities, the government can drive efficiency, enhance interagency collaboration, and deliver more impactful services to citizens. The Government Business Capability Model is a strategic tool that empowers executives to cultivate a cohesive and agile government ecosystem, positioning New Zealand as a leader in delivering effective and citizen-centric solutions.

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